Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-15 (canceled)

Claim 16 (new): An isolated zebrafish genetic strain having a dystrophin mutant phenotype resulting from a mutation within the zebrafish dystrophin gene.

Claim 17 (new): The zebrafish according to claim 16 having a *sapje* (sap) mutant phenotype.

Claim 18 (new): The zebrafish according to claim 17 having a mutation selected from the group consisting of sapje tm90c, tj7, ta222a, and combinations thereof.

Claim 19 (new): The zebrafish according to claim 18 having the sapje tm90c mutation.

Claim 20 (new): A fish model of mammalian muscular dystrophy or cardiomyopathy comprising an isolated zebrafish according to claim 16 or progeny, fry, or gametes thereof.

Claim 21 (new): The fish model according to claim 20 wherein the mammalian muscular dystrophy is human muscular dystrophy.

Claim 22 (new): A method for screening agents having potential activity on muscular dystrophy or cardiomyopathy comprising:

(a) providing a fish model of mammalian muscular dystrophy or cardiomyopathy according to claim 20;

(b) exposing the zebrafish to an agent; and

(c) determining any effect of the agent on a genetic or physical characteristic of the zebrafish or its progeny.

Claim 23 (new): The method according to claim 22 wherein the mammalian muscular dystrophy is human muscular dystrophy.

Claim 24 (new): The method according to claim 22 wherein the agent is a drug candidate, chemical, compound, nucleic acid, or mixture thereof.

Claim 25 (new): The method according to claim 22 wherein the fish is exposed to the agent by addition to fish raising media, or by direct administration to the fish by any suitable means.

Claim 26 (new): The method according to claim 22 wherein the effect is determined by any visual or light microscopic technique including techniques that utilize transgenic reporter gene expression to monitor muscle integrity.

Claim 27 (new): The method according to claim 26 wherein the effect is determined by simple optical inspection of living muscle tissue, birefringency of muscle tissue using polarized light, use of Green fluorescent protein transgenic lines driven by a muscle specific promoter, use of immunohistochemistry, use of antibodies directed against muscle specific epitopes or in situ hybridization for muscle specific gene expression.

Claim 28 (new): The method according to claim 23 wherein the agent is a drug candidate, chemical, compound, nucleic acid, or mixture thereof.

Claim 29 (new): The method according to claim 23 wherein the fish is exposed to the agent by addition to fish raising media, or by direct administration to the fish by any suitable means.

Claim 30 (new): The method according to claim 23 wherein the effect is determined by any visual or light microscopic technique including techniques that utilize transgenic reporter gene expression to monitor muscle integrity.

Claim 31 (new): The method according to claim 30 wherein the effect is determined by simple optical inspection of living muscle tissue, birefringency of muscle tissue using polarized light, use of Green fluorescent protein transgenic lines driven by muscle specific promoter(s), use of immunohistochemistry, use of antibodies directed against muscle specific epitopes or in situ hybridization for muscle specific gene expression.

Claim 32 (new): A method for monitoring or testing the effect of an agent having activity on muscular dystrophy or cardiomyopathy comprising:

(a) providing a fish model of mammalian muscular dystrophy or cardiomyopathy according to claim 22;

(b) exposing the zebrafish to the agent; and

(c) monitoring the effect of the agent on a genetic or physical characteristic of the zebrafish or its progeny.

Claim 33 (new): The method according to claim 32 wherein the mammalian muscular dystrophy is human muscular dystrophy.

Claim 34 (new): The method according to claim 32 wherein the agent is a drug candidate, chemical, compound, nucleic acid, or mixture thereof.

Claim 35 (new): The method according to claim 32 wherein the fish is exposed to the agent by addition to fish raising media, or by direct administration to the fish by any suitable means.

Claim 36 (new): The method according to claim 32 wherein the effect is determined by any visual or light microscopic technique including techniques that utilize transgenic reporter gene expression to monitor muscle integrity.

Claim 37 (new): The method according to claim 32 wherein the agent is a drug candidate, chemical, compound, nucleic acid, or mixture thereof.

Claim 38 (new): The method according to claim 33 wherein the fish is exposed to the agent by addition to fish raising media, or by direct administration to the fish by any suitable means.

Claim 39 (new): The method according to claim 33 wherein the effect is determined by any visual or light microscopic technique including techniques that utilize transgenic reporter gene expression to monitor muscle integrity.